TENNESSEE AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-1531

SIGNIFICANT MODIFICATION- 2 TO OPERATING PERMIT (TITLE V) Issued Pursuant to Tennessee Air Quality Act

This permit fulfills the requirements of Title V of the Federal Clean Air Act (42 U.S.C. 7661a-7661e) and the federal regulations promulgated thereunder at 40 CFR Part 70. (FR Vol. 57, No. 140, Tuesday, July 21, 1992 p.32295-32312). This permit is issued in accordance with the provisions of paragraph 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations. The permittee has been granted permission to operate an air contaminant source in accordance with emissions limitations and monitoring requirements set forth herein.

Date Issued: December 4, 2001 Permit Number: **554297**
Date of Significant Modification 1: July 10, 2002
Date of Minor Modification: January 20, 2004
Date of Significant Modification 2:
Date Expires: December 3, 2006

Issued To:
Seaman Corporation

Installation Address:
225 North Industrial Drive
Bristol

Installation Description:
Fabric and Vinyl Coating Operation

82-0007-01: Line 1-Vinyl/Fabric Coating Line, Line 2 and Line 3 (Fabric Coating) Controlled by an RTO
82-0007-03: Boiler- Natural gas /propane fired
82-0007-04: Line 7- Premixer and Dry Blend Vinyl Coating Line
82-0007-08: PVC Resin Silo
82-0007-10: New Dry Blend PVC Coating Line

Emission Source Reference No.: **82-0007**
Renewal Application Due Date: Between 03/07/2006 and 06/05/2006

Primary SIC: **22**

Responsible Official:
Name: John L. Crum
Title: Vice President, Operations

Facility Contact Person:
Name: Andrew Shimko
Title: Manager, Environmental
Phone: (330) 262-1111 Ext. 1515

Information Relied Upon:
Significant Modification Application received on December 2, 2004

(continued on the next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

POST OR FILE AT INSTALLATION ADDRESS

CONTENTS

SECTION A
GENERAL PERMIT CONDITIONS

A1.	**Definitions**	**1**
A2.	**Compliance requirement**	**1**
A3.	**Need to halt or reduce activity**	**1**
A4.	**The permit**	**1**
A5.	**Property rights**	**1**
A6.	**Submittal of requested information**	**1**
A7.	**Severability clause**	**2**
A8.	**Fee payment**	**2**
A9.	**Permit revision not required**	**3**
A10.	**Inspection and entry**	**3**
A11.	**Permit shield**	**4**
A12.	**Permit renewal and expiration**	**4**
A13.	**Reopening for cause**	**4**
A14.	**Permit transference**	**5**
A15.	**Air pollution alert**	**5**
A16.	**Construction permit required**	**5**
A17.	**Notification of changes**	**5**
A18.	**Schedule of compliance**	**5**
A19.	**Title VI**	**6**
A20.	**112 r**	**6**

SECTION B
GENERAL CONDITIONS for MONITORING, REPORTING, and ENFORCEMENT

B1.	**Recordkeeping**	**7**
B2.	**Retention of monitoring data**	**7**
B3.	**Reporting**	**7**
B4.	**Certification**	**7**
B5.	**Annual compliance certification**	**7**
B6.	**Submission of compliance certification**	**8**
B7.	**Emergency provisions**	**8**
B8.	**Excess emissions reporting**	**8**
B9.	**Malfunctions, startups and shutdowns - reasonable measures required**	**9**
B10.	**Sources located in non-attainment areas or having significant impact on air quality in a non-attainment area**	**9**
B11.	**Report required upon the issuance of notice of violation**	**9**

CONTENTS

SECTION C

PERMIT CHANGES

C1.	**Operational flexibility changes**	**10**
C2.	**Section 502(b)(10) changes**	**10**
C3.	**Administrative amendment**	**10**
C4.	**Minor permit modifications**	**11**
C5.	**Significant permit modifications**	**11**
C6.	**New construction or modifications**	**11**

SECTION D

GENERAL APPLICABLE REQUIREMENTS

D1.	**Visible emissions**	**12**
D2.	**General provisions and applicability for non-process gaseous emissions**	**12**
D3.	**Non-process emission**	**12**
D4.	**General provisions and applicability for process gaseous**	**12**
D5.	**Particulate emissions from process emission sources**	
12		
D6.	**Sulfur dioxide emission standards**	**12**
D7.	**Fugitive dust**	**12**
D8.	**Open burning**	**13**
D9.	**Asbestos**	**13**
D10.	**Annual Compliance Certification**	**13**

CONTENTS

SECTION E

SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

E1.	**Fee payment: actual emissions basis**	**14**
E2.	**Reporting requirements**	**15**
	(a) Semiannual reports	
	(b) Annual compliance certification	
E3.	**General Permit Conditions**	**16**
E4.	**Line–1-PVC Plastisol Vinyl Coating Line**	**20**
E5.	**Line 2-PVC Primer Fabric Coating Line**	**21**
E6.	**Line 3-Urethane Primer Fabric Coating Line**	**21**
E7.	**Line 7-Dry Blend Vinyl Coating Line**	**23**
E8.	**Boiler**	**24**
E9.	**PVC Resin Silo**	**24**
E10.	**Dry Blend Mixer**	**25**
E11.	**Line 10-Dry Blend Vinyl coating line**	**25**
END OF PERMIT NUMBER 554297		**26**

ATTACHMENT 1	**Opacity Matrix Decision Tree for EPA Method 9**	**1 page**
ATTACHMENT 2	**AP-42 Fifth Edition Tables for Natural Gas Combustion Emission Factors**	**4 pages**
ATTACHMENT 3	**AP-42 Fifth Edition Tables for Propane Combustion Emission Factors**	**2 pages**

SECTION E

SOURCE SPECIFIC EMISSION STANDARDS, OPERATING LIMITATIONS, and MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

82-0007	**Facility Description:**	Fabric and Vinyl Coating Facility. Operations include mixing and coating of uncoated nylon or polyester fabric and vinyl coated fabric substrate

Conditions E1 through E3 apply to all sources in Section E of this permit unless otherwise noted.

E1. Fee payment: actual emissions basis.

FEE EMISSIONS SUMMARY TABLE FOR MAJOR SOURCE 82-0007

REGULATED POLLUTANTS	ALLOWABLE EMISSIONS (tons per AAP)	ACTUAL EMISSIONS (tons per AAP)	COMMENTS
PARTICULATE MATTER (PM)	**N/A**	**AEAR**	
PM_{10}	**N/A**	**N/A**	
SO_2	**N/A**	**AEAR**	
VOC	**N/A**	**AEAR**	
NO_X	**N/A**	**AEAR**	
CATEGORY OF MISCELLANEOUS HAZARDOUS AIR POLLUTANTS (HAP WITHOUT A STANDARD)*			
VOC FAMILY GROUP	**N/A**	**AEAR**	**Fee emissions are included in VOC above.**
NON-VOC GASEOUS GROUP	**N/A**	**N/A**	
PM FAMILY GROUP	**N/A**	**N/A**	
CATEGORY OF SPECIFIC HAZARDOUS AIR POLLUTANTS (HAP WITH A STANDARD)**			
VOC FAMILY GROUP	**N/A**	**N/A**	
NON-VOC GASEOUS GROUP	**N/A**	**N/A**	
PM FAMILY GROUP	**N/A**	**N/A**	
CATEGORY OF NSPS POLLUTANTS NOT LISTED ABOVE***			
EACH NSPS POLLUTANT NOT LISTED ABOVE	**N/A**	**N/A**	

NOTES

AAP The **Annual Accounting Period** (**AAP**) is a twelve (12) consecutive month period that **begins each July 1st and ends June 30th of the following year**.

N/A **N/A** indicates that no emissions are specified for fee computation.

AEAR **AEAR** indicates that an **A**ctual **E**missions **A**nalysis is **R**equired to determine the actual emissions of:

(1) **each regulated pollutant** (Particulate matter, SO_2, VOC, NO_X and so forth. See TAPCR 1200-3-26-.02(2)(i) for the definition of a regulated pollutant.),

(2) **each pollutant group** (VOC Family, Non-VOC Gaseous, and Particulate Family), and

(3) the **Miscellaneous HAP Category**

under consideration during the **Annual Accounting Period**.

***** **Category Of Miscellaneous HAP (HAP Without A Standard):** This category is made-up of hazardous air pollutants that do not have a federal or state standard. Each HAP is classified into one of three groups, the **VOC Family** group**, the Non-VOC Gaseous** group**,** or the **Particulate (PM) Family** group**. For fee computation**, the **Miscellaneous HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-3-26-.02(2)(i).

** **Category Of Specific HAP (HAP With A Standard):** This category is made-up of hazardous air pollutants (HAP) that are subject to Federally promulgated Hazardous Air Pollutant Standards that can be imposed under Chapter 1200-3-11 or Chapter 1200-3-31. Each individual hazardous air pollutant is classified into one of three groups, the **VOC Family** group**, the Non-VOC Gaseous** group**,** or the **Particulate (PM) Family** group**. For fee computation**, each individual hazardous air pollutant of the **Specific HAP Category** is subject to the 4,000 ton cap provisions of subparagraph 1200-3-26-.02(2)(i).

*** **Category Of NSPS Pollutants Not Listed Above:** This category is made-up of each **N**ew **S**ource **P**erformance **S**tandard (**NSPS**) pollutant whose emissions are not included in the **PM**, **SO_2, VOC** or **NO_X** emissions from each source in this permit. **For fee computation**, each **NSPS pollutant not listed above** is subject to the 4,000 ton cap provisions of subparagraph 1200-3-26-.02(2)(I).

END NOTES

The permittee shall:

(1) Prepare an **actual emissions analysis** beginning July 1, 2003 in accordance with the above **Fee Emissions Summary Table.** The **actual emissions analysis** shall include:

- **(a)** the completed **Fee Emissions Summary Table**,
- **(b)** each **AEAR** required by the above **Fee Emissions Summary Table, and**
- **(c)** the records required by Conditions E3-2, E3-3, and E3-4 of this permit. These records shall be used to complete the **AEARs** required by the above **Fee Emissions Summary Table**.

(2) Submit the **actual emissions analysis** at the time the fees are paid in full.

(3) Calculate the fee due based upon the **actual emissions analysis**, and submit the payment on July 1st following the end of the **annual accounting period**. If any part of any fee imposed under TAPCR 1200-3-26-.02 is not paid within fifteen (15) days of the due date, penalties shall at once accrue as specified in TAPCR 1200-3-26-.02(8). Major sources may request an extension of time to file their emissions analysis with the Technical Secretary as specified in Condition A8(c)5 of this permit. Emissions for regulated pollutants shall not be double counted as specified in Condition A8(d) of this permit.

Payment of the fee due and the actual emissions analysis shall be submitted to The Technical Secretary at the address in Condition E2(b) of this permit.

TAPCR 1200-3-26-.02 (3) and (9), and 1200-3-9-.02(11)(e)1 (iii) and (vii)

E2. **Reporting requirements**.

(a) **Semiannual reports.** The semiannual reports shall cover the six month periods ending on June 30 and December 31 and shall be submitted within 60 days after the 6 month period.

These semiannual reports shall include:

(1) Any monitoring and recordkeeping required by Conditions E3-2, E3-4, E3-5, E3-6, E4-2, E5-2, E6-3, E6-4, E6-5, E7-2, E10-1, E11-2 and E11-3 of this permit. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.

(2) The visible emission evaluation readings from Condition E3-1 of this permit if required. However, a summary report of this data is acceptable provided there is sufficient information to enable the Technical Secretary to evaluate compliance.

(3) Identification of all instances of deviations from **ALL PERMIT REQUIREMENTS**.

These reports must be certified by a responsible official consistent with condition B4 of this permit and shall be submitted to The Technical Secretary at the address in Condition E2(b) of this permit.

TAPCR 1200-3-9-.02(11)(e)1.(iii)

(b) Annual compliance certification.

The permittee shall submit annually compliance certifications with terms and conditions contained in Sections A, B, D and E of this permit, including emission limitations, standards, or work practices. This compliance certification shall include all of the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable):

1. The identification of each term or condition of the permit that is the basis of the certification;
2. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
3. Whether such method(s) or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required by this permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Act, which prohibits knowingly making a false certification or omitting material information;
4. The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in E2(b)2 above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion* or exceedance** as defined below occurred; and
5. Such other facts as the Technical Secretary may require to determine the compliance status of the source.

* "Excursion" shall mean a departure from an indicator range established for monitoring under this paragraph, consistent with any averaging period specified for averaging the results of the monitoring.

** "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

The first certification shall cover the 12-month period from January 1, 2006 to December 31, 2006 and shall be submitted within 60 days after the 12-month period ending December 31, 2006. Subsequent certifications shall be submitted within 60 days after the end of each 12-month period following the first certification.

These certifications shall be submitted to: **TN APCD** and **EPA**

The Technical Secretary Division of Air Pollution Control ATTN: East Tennessee Permit Program 9th Floor, L & C Annex 401 Church Street Nashville, Tennessee 37243-1531	and	Air Planning Branch US EPA Region IV 61 Forsyth Street, SW Atlanta, GA 30303

40 CFR Part 70.6(c)(5)(iii) as amended in the Federal Register Vol.62, No.204, October 22, 1997, pages 54946 and 54947

General Permit Conditions:

E3-1. Visible emissions from this source shall not exceed twenty (20) percent opacity except for one six minute period per one (1) hour or more than twenty-four (24) minutes in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (6 minute average). TAPCR 1200-3-5-.03(6) and TAPCR 1200-3-5-.01(1)

Compliance Method: The permittee shall assure compliance with the opacity standard by utilizing the opacity matrix dated June 18, 1996 that is enclosed as Attachment 1.

If the magnitude and frequency of excursions reported by the permittee in the periodic monitoring for emissions is unsatisfactory to the Technical Secretary, this permit may be reopened to impose additional opacity monitoring requirements.

E3-2. The permittee shall keep records for each calendar month of the usage rate and VOC and HAP emissions of each adhesive or clean-up solvent, used at this facility, which are not used as constituents of the fabric or vinyl coatings. This information must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative for five years.

Agreement Letter dated 4/15/02 (PSD Avoidance)

PLANTWIDE CLEAN-UP SOLVENT USE

MATERIAL NAME	Material Usage (Pounds per month)	Pounds VOC per Pound	VOC emissions (pounds per month)**	HAP content (%)	HAP emissions* Pounds per month
$Material_1$					
$Material_2$					
$Material_i$					
Total					

*HAP emissions for Fee purposes only

** VOC emissions = material usage X lb/VOC/pound X 0.1 lb emissions/lb VOC (this is based on the company's statement that the clean up solvent is partly recovered). The emission factor of 0.1 lb emissions/ pound of VOC comes from EPA's FIRE database, version 6.22 (for SCC 4-02-011-05)

E3-3. Particulate matter, sulfur dioxide, VOC, and nitrogen oxides (NO_x) emissions from fuel usage at this facility (82-0007) shall be calculated and maintained by keeping the following natural gas/propane usage logs. These logs shall be used in the actual emissions analysis required by Condition E1 of this permit. They must be retained for a period of not less than five years and shall be made available for review upon request of the Technical Secretary or his representative.

MONTHLY COMBUSTION EMISSIONS LOG FOR SOURCE 82-0007

MONTH/YEAR (Fee Accounting Period is July 1 thru June 30 of the following year)	Boiler and Oven Propane Usage (gallons per month)	Boiler and Oven & RTO Natural Gas Usage (standard cubic feet per month)
July/year		
Aug/year, etc		
Jun/year		
Total	PU12	NGU12

EQUATIONS FOR THE NATURAL GAS EMISSIONS LOG CALCULATIONS FOR SOURCE 82-0007 :

1. PM Emissions (tons PM per year)= (NGU12 in scf/12 months)(ef=7.6 pounds PM/10^6scf)/(2000 lbs/ton)
2. NO_x Emissions (tons NO_x per year)= (NGU12 in scf/12 months)(ef = 100 pounds NO_x /10^6 scf)/(2000 lbs/ton) + (NGRTO12 in scf/12 months)(ef= 168 pounds NOx/106 scf)/(2000lb/ton)
3. SO_2 Emissions (tons SO_2 per year)=(NGU12 in scf/12 months)(ef= 0.6 pounds SO_2/10^6 scf)/(2000 lbs/ton)
4. VOC Emissions (tons VOC per year)=(NGU12 in scf/12 months)(ef= 5.5 pounds VOC/10^6 scf)/(2000 lbs/ton)

Where ef = natural gas combustion emission factor from AP-42 Fifth Edition, Supplement D (July 1998) and RTO manufacturer's data

EQUATIONS FOR THE PROPANE EMISSIONS LOG CALCULATIONS FOR SOURCE 82-0007:

1. PM Emissions (tons PM per year)=(PU12 in gal/12 months)(ef=0.6 lbs PM/10^3 gal)/(2000 lb/ton)
2. NO_x Emissions (tons NO_x per year)=(PU12 in gal/12 months)(ef=19 lbs NO_x/10^3 gal)/(2000 lb/ton)
3. SO_2 Emissions (tons SO_2 per year)=(PU12 in gal/12 months)(ef=0.10 S lbs SO_2/10^3 gal)/(2000 lb/ton)
4. VOC Emissions (tons VOC per year)=(PU12 in gal/12 months)(ef=0.5 lbs VOC/10^3 gal)/(2000 lb/ton)

Where ef= propane combustion emission factor from AP-42 Fifth Edition, Supplement B (October 1996)
And S= Sulfur content

YEARLY COMBUSTION EMISSIONS LOG FOR SOURCE 82-0007

YEAR (Fee Accounting Period is July 1 thru June 30 of the following year)	PM EMISSIONS (tons PM per year)	VOC EMISSIONS (tons VOC per year)	SO_2 EMISSIONS (tons SO_2 per year)	NO_x EMISSIONS (tons NO_x per year)

E3-4. Combined VOC emissions for this facility shall not exceed 244.8 tons per 12 consecutive months.

AGREEMENT LETTER DATED 4/15/02

Compliance Method: The permittee shall keep records in the following format to show compliance with the above condition.

Month	VOC emissions for Line 1	VOC emissions for Line 2	VOC emissions for Line 3	Total VOC emissions for line 1, 2 and 3	VOC Emissions for line 7	VOC emissions from Line 10	VOC emissions from clean up solvents from the entire facility (condition E3-2)
				V1	V2	V4	V3

Total emissions from the facility per month (V1+V2+V3+V4)	Total emissions for 12 consecutive months

E3-5. Particulate matter emissions from this source (Line 1, Line 2, Line 3) shall not exceed 3.59 pounds per hour.

TAPCR 1200-3-7-.03 (table 2)

Compliance Method: Compliance with this emission limitation shall be assured through recordkeeping of operational parameters for the baghouses. Compliance shall be assured by maintaining a minimum pressure drop of 0.5 inches of water pressure drop for Line 1 and Line 2 when these source are operating. The pressure drop shall be recorded once daily during actual process operation, in the following log. The logs must be retained for a period of not less than five years. Reports and certifications shall be submitted in accordance with Condition E2 of this permit.

For Fee purposes actual emissions are assumed to be equal to allowable emissions, unless otherwise demonstrated**.**

FOR LINE 1 and LINE 2 BAGHOUSES

DATE	**PRESSURE DROP (inches of water)**	**Operator initials**

E3-6. Pursuant to the requirements of the Compliance Assurance Monitoring (CAM) Rule (40 CFR 64), the permittee shall install, calibrate, certify to the Technical Secretary, operate, and maintain continuous monitoring equipment on the RTO which shall

monitor the combustion chamber temperature at all times when this coating line is in operation. The monitoring equipment shall meet the following requirements

1. The continuous temperature monitoring equipment shall be equipped with a continuous recorder and have an accuracy of ±1 percent of the combustion temperature being measured expressed in degrees Celsius, or 0.5°C, whichever is greater.
2. The continuous recorder may be any device, which records the combustion temperature at least four times per hour, at equally spaced intervals.
3. The temperature monitor and recorder shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

Any 3-hour block of time, when at least one coating line is in operation, during which the average combustion zone temperature in the RTO is more than 28°C (50°F) below the average combustion temperature during the most recent emission test which demonstrated that the source was in compliance, shall be considered an excursion.

E3-7. Only natural gas shall be used as supplemental fuel for the RTO. Natural gas or propane only shall be used as fuel for rest of the source.

E3-8. Records shall be kept for the usage of material containing volatile organic compounds and the emissions of hazardous air pollutants for compliance and for fee purposes in the format given below:
(1) Emissions in tons of each Hazardous Air Pollutant, (2) Emissions in tons of all Hazardous Air Pollutants and (3) Emissions in tons of VOCS excluding water and/or exempt compounds for all input materials used during all intervals of 12 consecutive months. A log of information in the following format, must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five years.

MONTHLY VOC/HAP EMISSIONS LOG MONTH: YEAR

MATERIAL NAME	USAGE (pounds per month)	VOC CONTENT (lbs VOC per pound)	Control efficiency	VOC EMISSIONS (tons VOC per month)	HAP_1 CONTENT (lbs HAP_1 per pound)	HAP_1 EMISSIONS (tons HAP_1 per month)	HAP_p CONTENT (lbs HAP_p per pound)	HAP_p EMISSIONS (tons HAP_p per month)	TOTAL HAP EMISSIONS (tons HAP_1 thru HAP_p per month)
TOTAL									

Note: p = 1, 2, 3,..... n = the number of different hazardous air pollutants. Use columns as required for the number of different hazardous air pollutants.

YEARLY VOC/HAP EMISSIONS LOG

MONTH/YEAR	**VOC EMISSIONS (tons VOC per month)	*VOC EMISSIONS (tons VOC per 12 months)	**TOTAL HAP EMISSIONS (tons per month)	Total HAP Emissions per (tons per 12 consecutive months)

(*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months].

(**) Fee Accounting period is each July 1st through the following June 30th.

E3-9. For sources required to maintain monthly logs, all data, including all required calculations, must be entered in the log no later than 30 days from the end of the month for which the data is required.

For sources required to maintain weekly logs, all data, including all required calculations, must be entered in the log no later than 7 days from the end of the week for which the data is required.

For sources required to maintain daily logs, all data, including all required calculations, must be entered in the log no later than 7 days from the end of the day for which the data is required.

E3-10. Purchase orders or invoices for all VOC and HAP containing materials associated with the permitted processes must be maintained and kept available for inspection by the Technical Secretary or his representative. These orders or invoices must be retained for not less than five (5) years.

E3-11. This facility is subject to the requirements found in MACT Rule for Fabric Printing, Coating & Dyeing Surface Coating (40 CFR part 63 subpart OOOO). This facility shall not emit more than 10 tons per 12 consecutive months of any single hazardous air pollutant, or 25 tons per 12 consecutive months of any combination of hazardous air pollutants. Compliance with this condition shall insure that the facility meets the definition of an area source under the MACT Rule for Fabric Printing, Coating & Dyeing (40 CFR 63 Subpart OOOO). Compliance with this limitation shall be assured by recordkeeping in Condition E3-8.

82-0007-01	**Line 1-PVC Plastisol Vinyl Coating Line:**	PVC plastisol coatings are prepared in mixers. A knife-over-roll coater applies the coating to a continuous web of vinyl coated fabric substrate previously coated on Line 2, or to a continuous web of uncoated nylon or polyester fabric. After the plastisol is applied, the fabric enters a 8.5 MM Btu/hr natural gas/propane fired oven to be cured. Emissions from this operation include volatile organic compounds, products of combustion, and PM from the mixing process, which is controlled by a baghouse.

Condition E4-1 through E4-2 apply to source 82-0007-01.

E4-1. The permittee shall not cause or allow the application of any coatings on this vinyl coating line with VOC content that exceeds 3.8 pounds/gallon of coating, excluding water and/or exempt compounds, as applied. The permittee shall not utilize when coating fabric, any coatings with VOC content that exceed 2.9 pound per gallon of coating, excluding water and/or exempt compounds, as applied.

TAPCR 1200-3-18-.16(3) and 1200-3-18-.15

Compliance Method: Compliance with the above condition is based on the fact that the maximum VOC content for the coating will not exceed 0.55 pound per gallon.

The VOC content of solvent-based coatings* with a VOC emission standard included in Chapter 1200-3-18 of the Tennessee Air Pollution Control Regulations shall be determined once by using the procedures and analyses of EPA Method 24 as stipulated in 1200-3-18-.81 of the Regulations. This determination shall be made for the coating as supplied by the paint vendor. This information may be obtained by laboratory analyses or from manufacturer or vendor certification stating the VOC content was determined by EPA Method 24.

The VOC content of water-based coatings** and thinners shall be determined by MSD sheets or from manufacturer or vendor formulation data which explicitly list VOC content by weight.

The VOC content of any new coating shall be determined as stated above. The results of all of these determinations for both existing and new coatings for the emission source of concern shall also be compiled in a tabular or spreadsheet format and maintained at the source location. This information shall be retained for a period of at least 5 years and shall be made available for inspection by the Technical Secretary or his representative.

* A solvent-based coating is one which contains 5 percent or less water by weight in its volatile fraction.

** A water-based coating is one which contains more than 5 percent water by weight in its volatile fraction.

TAPCR 1200-3-18

E4-2. Records shall be kept for the usage of material containing volatile organic compounds and the emissions of hazardous air pollutants for compliance and for fee purposes in the format given in condition E3-8.

82-0007-02	**Line 2-PVC Primer Fabric Coating Line:**	PVC Primers are prepared in mixers. A pad roll coater applies the primer (commonly called "adhesive") to a continuous web of uncoated nylon or polyester fabric. After the primer is applied, the fabric enters an 8.5 MMBtu/hr natural gas/propane fired oven to be cured. Emissions from this source include volatile organic compounds, products of combustion, and PM from the mixing process, which is controlled by a baghouse.

Condition E5-1 through E5-2 apply to source 82-0007-02.

E5-1. The permittee shall not cause or allow the application of any coating on that operation with VOC content in excess of 0.35 kilogram per liter (kg/L) (2.9 pounds per gallon [lb/gal]) of coating, excluding water and/or exempt compounds, as applied

TAPCR 1200-3-18-.15

Compliance Method: Compliance with the above condition is based on the fact that the maximum VOC content for the coating will not exceed 0.55 pound per gallon.

The VOC content of solvent-based coatings* with a VOC emission standard included in Chapter 1200-3-18 of the Tennessee Air Pollution Control Regulations shall be determined once by using the procedures and analyses of EPA Method 24 as stipulated in 1200-3-18-.81 of the Regulations. This determination shall be made for the coating as supplied by the paint vendor. This information may be obtained by laboratory analyses or from manufacturer or vendor certification stating the VOC content was determined by EPA Method 24.

The VOC content of water-based coatings** and thinners shall be determined by MSD sheets or from manufacturer or vendor formulation data which explicitly list VOC content by weight.

The VOC content of any new coating shall be determined as stated above. The results of all of these determinations for both existing and new coatings for the emission source of concern shall also be compiled in a tabular or spreadsheet format and maintained at the source location. This information shall be retained for a period of at least 5 years and shall be made available for inspection by the Technical Secretary or his representative.

* A solvent-based coating is one which contains 5 percent or less water by weight in its volatile fraction.

** A water-based coating is one which contains more than 5 percent water by weight in its volatile fraction.

TAPCR 1200-3-18

E5-2. Records shall be kept for the usage of material containing volatile organic compounds and the emissions of hazardous air pollutants for compliance and for fee purposes in the format given in condition E3-8.

82-0007-06	**Line 3-Urethane Primer Fabric Coating Line:**	A knife-over-roll coater applies the urethane primer to a continuous web of uncoated nylon or polyester fabric. After the primer is applied, the fabric enters a steam heated oven to be cured. Emissions from this source are volatile organic compounds, including hazardous air pollutants and are controlled by RTO. NSPS

Conditions E6-1 and E6-6 apply to source 82-0007-06.

E6-1. The permittee shall not cause or allow the application of any coating on that operation with VOC content in excess of 0.35 kilogram per liter (kg/L) (2.9 pounds per gallon [lb/gal]) of coating, excluding water and/or exempt compounds, as applied.

TAPCR 1200-3-18-.15

Compliance Method: The permittee shall comply with this rule through:

1. Compliance with the New Source Performance Standards (40 CFR 60 Subpart VVV),
2. Utilizing coatings with a maximum VOC content of 85%. (This will insure that the required control efficiency as calculated per TAPCR 1200-3-18-.15(5)(a) never exceeds the NSPS requirement of 90% overall control).

E6-2. **T**he permittee shall reduce the VOC emissions to the atmosphere from the coating operation by at least 90 percent (the "emission reduction" method).

40 CFR 60.742(b)

Compliance Method:

A stack test was performed on August 29, 2005 to determine capture efficiency of the RTO from the coating operation by capturing, venting, and measuring all VOC emissions from that coating operation. The capture efficiency meets the 90 percent requirement. Continuing compliance is assured by conditions E6-3 and E6-4.

E6-3. An affected facility who demonstrates compliance by the vapor capture efficiency method is required to submit a monitoring plan for the vapor capture system to the Administrator for approval with the notification of the start-up. The facility intends to monitor vapor capture performance through monitoring and recording of the oven exhaust fan motor. On a daily basis, it will be checked and recorded if the exhaust fan is working or not.

E6-4. Per 40 CFR 60.747, the permittee shall submit quarterly reports that indicate:

1. All 3-hour periods (during actual coating operation) during which the average combustion temperature of the RTO is more than 50°F (28°C) below the average combustion temperature of the RTO during the most recent performance test that demonstrated compliance;
2. All periods during actual mixing or coating when a required monitoring device (if any) was malfunctioning or not operating;
3. All periods during actual mixing or coating when the RTO was malfunctioning or not operating;
4. If quarterly reports are not required because no periods specified above have occurred, the permittee shall submit semiannual statements clarifying this fact.

Quarterly reports, if required, must be postmarked within 30 days of the end of the reporting period. Semiannual statements shall be included in the semiannual report specified in Condition E2(a) of the title V permit.

E6-5. Records shall be kept for the usage of material containing volatile organic compounds and the emissions of hazardous air pollutants for compliance and for fee purposes in the format given in condition E3-8.

E6-6. **T**he permittee shall install, operate, and maintain a cover on each mixer used to mix coatings for Coating Line 3.

40 CFR 60.742(c)(2)

Compliance Method: (per 40 CFR 60.743(d))

1. Covers shall satisfy the specifications below:
    a. Cover shall be closed at all times except when adding ingredients, withdrawing samples, transferring the contents, or making visual inspection when such activities cannot be carried out with cover in place. Such activities shall be carried out through ports of the minimum practical size;

    b. Cover shall extend at least 2 centimeters beyond the outer rim of the opening or shall be attached to the rim;

    c. Cover shall be of such design and construction that contact is maintained between cover and rim along the entire perimeter;

    d. Any breach in the cover (such as a slit for insertion of a mixer shaft or port for addition of ingredients) shall be covered consistent with the requirement above when not actively in use. An opening sufficient to allow safe clearance for a mixer shaft is acceptable during those periods when the shaft is in place; and;

    e. A polyethylene or nonpermanent cover may be used provided it meets the requirements above. Such a cover shall not be reused after once being removed.

2. Procedures detailing the proper use of covers, as specified above, shall be posted in all areas where the affected coating mix preparation equipment is used.

82-0007-04	**Line 7 – Dry Blend Vinyl Coating Line**	Dry Blend coatings are prepared in a mixer. A hot melt calender coater applies the coating to a continuous web of vinyl or urethane coated fabric substrate previously coated on either Line 2 or Line 3. Emissions from this operation include volatile organic compounds and PM from the mixing process, which is controlled by a baghouse.

Conditions E7-1 through E7-2 apply to source 82-0007-04

E7-1. The permittee shall not cause or allow the application of coatings on this line that exceeds 3.8 pounds/gallon of coating, excluding water and/or exempt compounds, as applied.

TAPCR 1200-3-18-.16(3)

Compliance Method: Compliance with the above condition is based on the fact that the maximum VOC content for the coating will not exceed 0.0435 lb per gal.

E7-2. Records shall be kept for the usage of material containing volatile organic compounds and the emissions of hazardous air pollutants for compliance and for fee purposes in the format given below or an alternative format which readily provides the same information: (1) Emissions in tons of each Hazardous Air Pollutant, (2) Emissions in tons of all Hazardous Air Pollutants and (3) Emissions in tons of VOCS excluding water and/or exempt compounds for all input materials used during all intervals of 12 consecutive months. A log of information in the following format, must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five years.

MONTHLY VOC/HAP EMISSIONS LOG FOR LINE 7 MONTH: YEAR

MATERIAL NAME	USAGE (lbs per month)	VOC CONTENT (pounds VOC per lb)	VOC EMISSIONS (tons VOC per month)	HAP_1 CONTENT (pounds HAP_1 per lb)	HAP_1 EMISSIONS (tons HAP_1 per month)	HAP_p CONTENT (pounds HAP_p per lb)	HAP_p EMISSIONS (tons HAP_p per month)	TOTAL HAP EMISSIONS (tons HAP_1 thru HAP_p per month)
TOTAL								

Note: p = 1, 2, 3,..... n = the number of different hazardous air pollutants. Use columns as required for the number of different hazardous air pollutants.

YEARLY VOC/HAP EMISSIONS LOG FOR LINE 7

MONTH/YEAR	**VOC EMISSIONS (tons VOC per month)	*VOC EMISSIONS (tons VOC per 12 months)	**TOTAL HAP EMISSIONS (tons per month)

(*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months].

(**) Fee Accounting period is each July 1st through the following June 30th.

82-0007-03	**Boiler:**	The boiler has a rated heat input capacity of 14.65 MMBtu/hr. It is permitted to burn natural gas. Propane may be used as a standby fuel.

Conditions E8-1 through E8-3 apply to source 82-0007-03

E8-1. Only natural gas and propane shall be used as fuels for this source.

E8-2. Sulfur dioxide emitted from this source shall not exceed 6.75 pounds per hour and 2.5 tons per 12 consecutive months.

AGREEMENT LETTER DATED 7/17/2000 (more stringent than 1200-3-14-.02(2)(a))

Compliance Method: Compliance with this limitation is based on EPA AP-42 emission factor of 0.6 lb /10^6 ft^3 for natural gas combustion (5^{th} Edition). Included as attachment #2 to the permit.

E8-3. Particulate matter emitted from this source shall not exceed 0.109 pound per hour.

AGREEMENT LETTER DATED 12/7/2000 (more stringent than 1200-3-6-.02(2))

Compliance Method: Compliance with this limitation is based on EPA AP-42 emission factor of 7.6 lb /10^6 ft^3 for natural gas combustion (5^{th} Edition). Included as attachment #2 to the permit.

82-0007-08	**PVC Resin Silo**	Vertical silo for storage of dry, granular resin used in the production of dry blend. Capacity is 70,000 lbs. Particulate matter emissions occur only during the filling process, and are controlled by a baghouse.

Conditions E9-1 through E9-2 apply to source 82-0007-08

E9-1. Particulate matter emitted from this source shall not exceed 0.25 grains per dry standard cubic foot of exhaust gas (3.13 lb/hr based on maximum dscfm flow rate).

TAPCR 1200-3-7-.04(2)

Compliance Method: The baghouse will be maintained, kept in good operating condition, and inspected semiannually to ensure compliance with the applicable particulate matter limits. Documentation of the semiannual inspections and any maintenance performed will be kept on site for a period of not less than five (5) years.

For Fee purposes actual emissions are assumed to be equal to allowable emissions, unless otherwise demonstrated**.**

E9-2. Filling of the silo shall not occur without the use of baghouse controls.

CONST. PERMIT 951743P ISSUED 12/13/99

Compliance Method: The baghouse shall be maintained as described in E9-1 and operating properly during all loading to the silo.

82-0007-09	**Dry Blend Mixer**	Dry Blend coatings are prepared in a mixer. The dry blend coatings are supplied to Line 7 and Line 10. Emissions from this source are PM from the mixing process, which is controlled by a baghouse..

Conditions E10-1 through E10-3 apply to source 82-0007-09

E10-1. Particulate matter emitted from this source shall not exceed 4.0 pounds per hour.

TAPCR 1200-3-7-.02(4) Table 1

Compliance Method: Compliance with this emission limitation shall be assured through recordkeeping of operational parameters for the baghouse. Compliance shall be assured by maintaining a minimum pressure drop of 0.5 inches of water pressure drop for this operation when this source is operating. The pressure drop shall be recorded once daily during actual process operation, in the following log. The logs must be retained for a period of not less than five years. Reports and certifications shall be submitted in accordance with Condition E2 of this permit.

For Fee purposes actual emissions are assumed to be equal to allowable emissions, unless otherwise demonstrated**.**

DATE	PRESSURE DROP (inches of water)	Operator initials

E10-2. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control device(s). Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five years.

E10-3. This source shall not operate unless the control device is in operation. In the event a malfunction/failure of a control device(s) occurs, the operation of the process(es) controlled by the control device(s) shall be regulated by the provisions of Chapter 1200-3-20 of the Tennessee Air Pollution Control Regulations.

82-0007-10	**Line 10 – Dry Blend Vinyl Coating Line**	A hot melt calender coater (NSPS) the coating to a continuous web of vinyl or urethane coated fabric substrate previously coated on either Line 2 or Line 3. Emissions from this operation include volatile organic compounds. This line will share the same mixer as Line 7. A 3.2 MM Btu/hr gas fired oil heater provides heating for this line.

Conditions E11-1 through E11-3 apply to source 82-0007-10

E11-1. The permittee shall not cause or allow the application of coatings on this line that exceeds 3.8 pounds/gallon of coating, excluding water and/or exempt compounds, as applied.

TAPCR 1200-3-18-.16(3)

Compliance Method: Compliance with the above condition is based on the fact that the maximum VOC content for the coating will not exceed 0.0435 lb per gal.

E11-2. Records shall be kept for the usage of material containing volatile organic compounds and the emissions of hazardous air pollutants for compliance and for fee purposes in the format given below or an alternative format which readily provides the same information: (1) Emissions in tons of each Hazardous Air Pollutant, (2) Emissions in tons of all Hazardous Air Pollutants and (3) Emissions in tons of VOCS excluding water and/or exempt compounds for all input materials used during all intervals of 12 consecutive months. A log of information in the following format, must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five years.

MONTHLY VOC/HAP EMISSIONS LOG FOR LINE 10 MONTH: YEAR

MATERIAL NAME	USAGE (lbs per month)	VOC CONTENT (pounds VOC per lb)	VOC EMISSIONS (tons VOC per month)	HAP_1 CONTENT (pounds HAP_1 per lb)	HAP_1 EMISSIONS (tons HAP_1 per month)	HAP_p CONTENT (pounds HAP_p per lb)	HAP_p EMISSIONS (tons HAP_p per month)	TOTAL HAP EMISSIONS (tons HAP_1 thru HAP_p per month)
TOTAL								

Note: p = 1, 2, 3,..... n = the number of different hazardous air pollutants. Use columns as required for the number of different hazardous air pollutants.

YEARLY VOC/HAP EMISSIONS LOG FOR LINE 10

MONTH/YEAR	**VOC EMISSIONS (tons VOC per month)	*VOC EMISSIONS (tons VOC per 12 months)	**TOTAL HAP EMISSIONS (tons per month)

(*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this Table, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months].

(**) Fee Accounting period is each July 1st through the following June 30th.

E11-3. Pursuant to 40 CFR Subpart VVV (New Source Performance Standards), the permittee shall record semiannually:

a. an estimate of projected VOC use on this line and the Dry Blend Mixer when mixing compound for this line; and
b. the actual 12-month VOC use on this line and the Dry Blend Mixer when mixing compound for this line.

The permittee shall report the first semiannual estimate in which projected annual VOC use exceeds 95 Megagrams/yr and the first 12-month period in which actual VOC use exceeds 95 Megagrams/yr. Reports shall be postmarked within 30 days of the end of the reporting period.

END OF PERMIT NUMBER: 554297

ATTACHMENT 1

OPACITY MATRIX DECISION TREE for VISIBLE EMISSION EVALUATION METHOD 9 dated JUNE 18, 1996

Decision Tree PM for Opacity for Sources Utilizing EPA Method 9

Notes:

PM = Periodic Monitoring required by 1200-3-9-.02(11)(e)(1)(iii)

This Decision Tree outlines the criteria by which major sources can meet the periodic monitoring and testing requirements of Title V for demonstrating compliance with the visible emissions standards in paragraph 1200-3-5-.01. It is not intended to determine compliance requirements for EPA's Compliance Assurance Monitoring (CAM) Rule (formerly refferred to as Enhanced Monitoring - Proposed 40 CFR 64).

Examine each emission source using this Decision Tree to determine PM required.

Use of continuous emission monitoring systems eliminates the need to do any additional periodic monitoring.

Visible Emission Evaluations (VEEs) are to be conducted utilizing EPA Method 9. The observer must be properly certified to conduct valid evaluations.

Typical Pollutants
Particulates, VOC, CO, SO_2, NO_x, HCl, HF, HBr, Ammonia, and Methane

Initial observation to be repeated within 90 days of startup of a modified source if a new construction permit is issued for modification of the source.

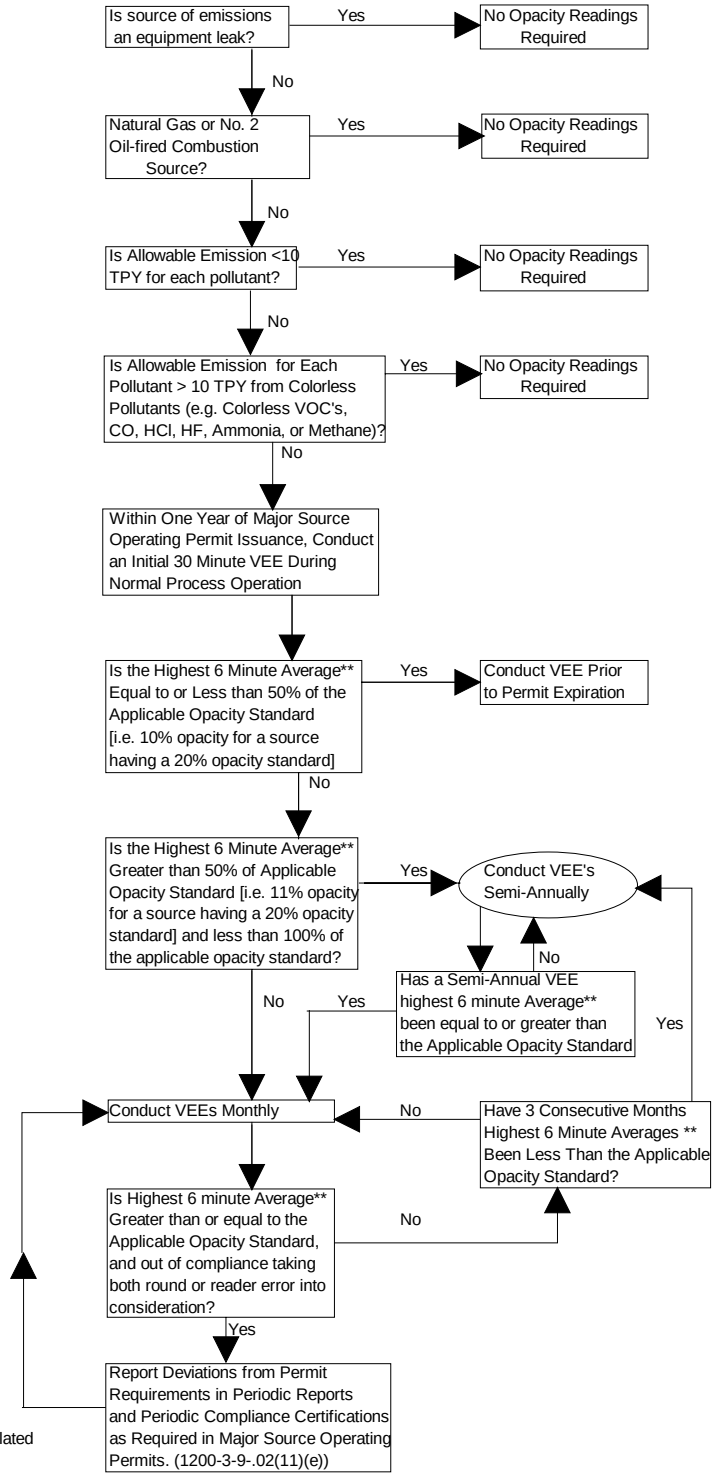
A VEE conducted by TDAPC personnel after the Title V permit is issued will also constitute an initial reading.

Reader Error
EPA Method 9, Non-NSPS or Neshaps stipulated opacity standards:
The TDAPC guidance is to declare non-compliance when the highest six-minute average** exceeds the standard plus 6.8% opacity (e.g. 26.8% for a 20% standard).

EPA Method 9, NSPS or NESHAPS Stipulated Opacity Standards:
EPA guidance is to allow only engineering round. No allowance for reader error is given.

*Not Applicable to Asbestos Manufacturing Subject to 40 CFR 61.142

**Or second highest six minute average, if the source has an exemption period stipulated in either the Regulations or in the permit.



ATTACHMENT 2

AP-42 FIFTH EDITION EMISSION FACTORS for NATURAL GAS COMBUSTION (Supplement D, July 1998)

ATTACHMENT 3

AP-42 FIFTH EDITION EMISSION FACTORS for PROPANE COMBUSTION (Supplement B, October 1996)